SECTION 4.0 ALTERNATIVES TO THE PROPOSED PROJECT

4.1 INTRODUCTION

Section 15126.6(a) of the CEQA Guidelines provides guidance on the scope of alternatives to a proposed project that must be evaluated. It states:

An EIR shall describe a range of reasonable alternatives to the project or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives, which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose it's reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.

4.2 PROPOSED PROJECT SUMMARY

4.2.1 PROPOSED PROJECT OBJECTIVES

The key objective of the Proposed Project is to provide Airport terminal facilities to adequately accommodate the minimum number of flights provided for in the Airport Noise Compatibility Ordinance, as well as the number of passengers served by those flights. To meet this objective, the project design must provide for the following:

- Maximize safety and security of passengers, visitors, and tenants by adhering to Transportation Security Administration (TSA), FAA and all applicable State and local standards including the City's fire, building, and safety codes.
- Ensure the project sizing and design of the improvements is in keeping with the parameters of the adopted Airport Noise Compatibility Ordinance.
- Maintain the current character of the Airport Terminal Building as a Long Beach Cultural Heritage Landmark by creating an environment in which the design of the new facilities respects the architectural/aesthetic character of the existing Airport Terminal Building.
- Provide uncomplicated, operationally and energy-efficient, value-driven design within a plan that can be developed in incremental stages.

4.2.2 PROJECT RELATED IMPACTS

Since the purpose of an alternatives evaluation is to consider alternatives that would avoid or substantially lessen any of the significant effects of the project an understanding of the significant impacts is necessary. The following is provides a summary of the significant impacts that have been identified with the Proposed Project. However, it should be noted that many of these impacts would be reduced to a level of less than significant through the implementation of the mitigation program recommended as part of this EIR.

Aesthetics

Section 3.1, Aesthetics provides a full discussion of each of the following construction related impacts:

- The Proposed Project would alter views of the project site during construction activities, potentially resulting in short-term aesthetic impacts in the vicinity of the terminal. This impact would be reduced to less than significant with the implementation of the recommended mitigation program presented in Section 3.1.3.
- The Proposed Project would result in construction activities and expansion of the terminal facilities. This could result in light and glare impacts associated with security lighting and light emanating from the proposed improvements. This impact would be reduced to less than significant with the implementation of the recommended mitigation program presented in Section 3.1.3.

Air Quality/Health Risk Assessment

Section 3.2, Air Quality/Health Risk Assessment provides a full discussion of the following construction impact and additional effects related to the Optimized Flights scenario:

- Project-related construction activities would result in a significant short-term constructionrelated air quality impact for NO_X and VOC. Implementation of mitigation program presented in Section 3.2.3 would reduce these impacts, but not to a level considered less than significant.
- Incremental air quality emissions with the Optimized Flights would exceed SCAQMD's PM₁₀ concentration threshold due to associated GSE and vehicular traffic activity, contribute substantially to an existing air quality violation, and expose sensitive receptors to significant PM₁₀ concentrations. Implementation of the mitigation program presented in Section 3.2.3 would reduce these impacts, but not to a level considered less than significant.
- Air quality emissions with the Optimized Flights would exceed SCAQMD's thresholds of significance for CO and NO_X. The mitigation program presented in Section 3.2.3 would reduce the CO impacts to a level considered less than significant. NO_X emissions would remain significant even after implementation of the mitigation program.

Cultural Resources

Section 3.3, Cultural Resources, provides a full discussion of each of the following project related impacts:

• The Proposed Project would result in alterations to a designated historical landmark. This impact would be reduced to less than significant with the implementation of the recommended mitigation program presented in Section 3.3.3.

Hazards and Hazardous Materials

Section 3.4, Hazards and Hazardous Materials, provides a full discussion of each of the following construction related impacts:

- During construction, asbestos containing materials could be disturbed and introduced into the environment. This impact would be reduced to a level of less than significant with implementation of the recommended mitigation program presented in Section 3.4.3.
- During construction, lead-based paint could be introduced into the environment. This impact would be reduced to a level of less than significant with implementation of the recommended mitigation program presented in Section 3.4.3.
- During grading activities at Parcel O, aerially-deposited lead could be introduced into the environment. This impact would be reduced to a level of less than significant with the implementation of the recommended mitigation program presented in Section 3.4.3.
- During grading activities at Parcel O, DDT could be introduced into the environment. This impact would be reduced to a level of less than significant with the implementation of the recommended mitigation program presented in Section 3.4.3.
- During construction, hazardous materials could be transported onto the Airport along established haul routes, including Willow Street. Potential impacts to schools would be mitigated to a level considered less than significant through the implementation of the recommended mitigation program presented in Section 3.4.3.

Land Use and Planning

Section 3.5, Land Use and Planning, provides a full discussion of each of the following Optimized Flights effect:

• The Optimized Flights scenario has the potential to induce Airport land uses beyond the Airport boundary. Specifically, the increased flight levels would require additional vehicular parking beyond the levels provided by the Proposed Project. This impact is associated only with the Optimized Flights scenario and not the Proposed Project. Implementation of the mitigation measure in Section 3.8.3 (Transportation and Circulation) would reduce this impact to a level of less than significant.

Noise

Section 3.6, Noise, provides a full discussion of the following construction related impact:

 Night construction activity on Parcel O may result in noise levels in excess of the noise levels specified in the Long Beach Noise Ordinance if heavy construction equipment associated with grading and paving are used.

Public Services

No significant public service impacts were identified for the Proposed Project.

Transportation and Circulation

Section 3.8, Transportation and Circulation, provides a full discussion of each of the following effects that would occur with the Optimized Flights scenarios:

 The Existing Plus Optimized Flights scenario would result in significant impacts at the Spring Street/Lakewood Boulevard and the Willow Street/Lakewood Boulevard intersections during the weekday AM peak hour. With implementation of MM 3.8-1, this impact would be reduced to less than significant.

 With the Optimized Flights scenario, there would be insufficient parking with the Proposed Project. With the implementation of the MM 3.8-2, this impact would be reduced to a level of less than significant.

4.3 <u>DESCRIPTION OF ALTERNATIVES CARRIED FORWARD</u>

As previously described in Section 2.0, Project Description, to facilitate the understanding of the reader, the alternatives analysis was presented in the body of the report. The Proposed Project and three alternatives (Alternatives A, B, and C) addressed in Section 3 provide the decisionmakers and public a range in the project intensity. As required by the CEQA Guidelines, one of the three alternatives is a No Project Alternative (Alternative C). This section of the EIR restates the descriptions of the three alternatives addressed in Section 3, documents an alternative that was considered but not carried forward (Alternative D), as well as identifies the environmentally superior alternative. A summary table of the alternatives (Alternatives A, B, and C), including Alternative D (Alternative not carried forward) is provided below in Table 4.3-1.

TABLE 4.3-1
LONG BEACH AIRPORT PASSENGER TERMINAL IMPROVEMENTS
EIR ALTERNATIVES

	Proposed	Alternative A	Alternative B (Reduced	Alternative C			
Description	Project	(9/22/03 NOP)	Facilities)	(No Project)	Alternative D ⁹		
Holdrooms							
Permanent Space ¹	6,500 sf	6,500 sf	6,500 sf	6,500 sf	6,500 sf		
Temporary Space ²	0 sf	0 sf	0 sf	13,150 sf	0 sf		
Proposed Additional Space ³	21,171 sf	20,000 sf	17,580 sf	0 sf	0 sf		
Subtotal	27,671 sf	26,500 sf	24,080 sf	19,650 sf	6,500 sf		
	Passen	ger Security Scre	eening				
Existing	3,900 sf	3,900 sf	3,900 sf	3,900 sf	3,900 sf		
Proposed Additional Space	7,000 sf	6,000 sf	5,600 sf	0 sf	0 sf		
Subtotal	10,900 sf	9,900 sf	9,500 sf	3,900 sf	3,900 sf		
	C	oncession Area					
Permanent Space ¹	5,460 sf	5,460 sf	5,460 sf	5,460 sf	5,460 sf		
Proposed Additional Space ³	9,541 sf	8,000 sf	6,400 sf	0 sf	0 sf		
Subtotal	15,001 sf	13,460 sf	11,860 sf	5,460 sf	5,460 sf		
		ge Security Scre					
Baggage Security Screening	7,000 sf ⁴	7,000 sf ⁴	7,000 sf ⁴	5,000 sf	0 sf		
Baggage Claim Devices							
Passenger Side	510 lf	380 lf	380 lf	226 lf	130 lf		
Airline Loading Side	310 lf	250 lf	250 lf	180 lf	90 lf		
Subtotal	820 lf	630 lf	630 lf	406 lf	220 lf		
Baggage Service Office	900 sf	825 sf	825 sf	0 sf	0 sf		
Multi-Purpose Rooms	300 sf	300 sf	300 sf	0 sf	0 sf		
Subtotal	1,200 sf	1,125 sf	1,125 sf	0 sf	0 sf		
Restrooms (non-secure)							
Permanent Space ¹	1,330 sf	1,330 sf	1,330 sf	1,330 sf	1,330 sf		

TABLE 4.3-1 (Continued) LONG BEACH AIRPORT PASSENGER TERMINAL IMPROVEMENTS EIR ALTERNATIVES

Description	Proposed Project	Alternative A (9/22/03 NOP)	Alternative B (Reduced Facilities)	Alternative C (No Project)	Alternative D ⁹		
Temporary Space ²	0 sf	0 sf	0 sf	0 sf	0 sf		
Proposed Additional Space ³	2,000 sf	850 sf	850 sf	0 sf	0 sf		
Subtotal	3,330 sf	2,180 sf	2,180 sf	1,330 sf	1,330 sf		
Office Space							
TSA							
Temporary Space	3,600 sf	3,600 sf	3,600 sf	3,600 sf	0 sf		
Proposed Additional Space	1,591 sf	1,400 sf	0 sf	0 sf	0 sf		
Subtotal	5,191 sf	5,000 sf	3,600 sf	3,600 sf	0 sf		
Airlines (Operations Offices)		,	,	,	l.		
Permanent Space	2,000 sf	2,000 sf	2,000 sf	2,000 sf	2,000 sf		
Temporary Space	0 sf	0 sf	0 sf	0 sf	0 sf		
Proposed Additional Space	3,754 sf	5,000 sf	3,000 sf	0 sf	0 sf		
Subtotal	5,754 sf	7,000 sf	5,000 sf	2,000 sf	2,000 sf		
Airport (Office & Conference)				L			
Permanent Space	6,970 sf	6,970 sf	6,970 sf	6,970 sf	6,970 sf		
Temporary Space	0 sf	0 sf	0 ⁶ sf	0 sf	0 sf		
Proposed Additional Space	5,000 sf	10,000 sf	0 sf	0 sf	0 sf		
Subtotal	11,970 sf	16,970 sf	6,970 sf	6,970 sf	6,970 sf		
Subtotal for Office Space	22,915 sf	28,970 sf	15,570 sf	12,570 sf	8,970 sf		
	Tie	cketing Facilities	<u> </u>				
Ticket Counter Area (Existing)	1,250 sf	1,250 sf	1,250 sf	1,250 sf	1,250 sf		
Proposed Additional Space	680 sf	0 sf	0 sf	0 sf	0 sf		
Subtotal	1,930 sf	1,250 sf	1,250 sf	1,250 sf	1,250 sf		
Ticket Counter Queuing (Existing)	1,400 sf	1,400 sf	1,400 sf	1,400 sf	1,400 sf		
Proposed Additional Space	1,400 sf	0 sf	0 sf	0 sf	0 sf		
Subtotal	2,800 sf	1,400 sf	1,400 sf	1,400 sf	1,400 sf		
Airline Ticket Office (Existing)	4,360 sf	4,360 sf	4,360 sf	4,360 sf	4,360 sf		
Proposed Additional Space	243 sf	0 sf	0 sf	0 sf	0 sf		
Subtotal	4,603 sf	4,360 sf	4,360 sf	4,360 sf	4,360 sf		
Circulation - Ticketing (Existing)	1,400 sf	1,400 sf	1,400 sf	1,400 sf	1,400 sf		
Proposed Additional Space	4,100 sf	0 sf	0 sf	0 sf	0 sf		
Subtotal	5,500 sf	1,400 sf	1,400 sf	1,400 sf	1,400 sf		
Subtotal for Ticketing Facilities	14,833 sf	8,410 sf	8,410 sf	8,410 sf	8,410 sf		
Total	102,850 sf	97,545 sf	79,725 sf	56,320 sf	34,570 sf		
Airline Gates and Parking Positions							
Airline Gates	11	11	11	8	8		
Aircraft Parking Positions	12 to 14	12 to 14 ⁵	12 to 14	10	10		
Vehicular Parking							
Permanent Non-Leased Spaces	2,835	2,835	2,835	2,835	2,835		
Leased Spaces	0	0	0	08	0		

TABLE 4.3-1 (Continued) LONG BEACH AIRPORT PASSENGER TERMINAL IMPROVEMENTS EIR ALTERNATIVES

Description	Proposed Project	Alternative A (9/22/03 NOP)	Alternative B (Reduced Facilities)	Alternative C (No Project)	Alternative D ⁹
Proposed Additional Spaces	3,451 ⁷	3,451 ⁷	3,451 ⁷	0	0
Total	6,286	6,286	6,286	2,835	2,835

sf square feet

- If linear feet
- Permanent floor space in Airport Terminal Building and permanent 1984 holdroom building
- Temporary floor space in modulars
- ³ Temporary (modular) space would be replaced with permanent facilities
- The February 8, 2005 City Council action reflected a range of square footage for these areas. The lower end is presented here. Up to 3,000 square feet may be added for a total of 10,000 square feet of new space.
- ⁵ The September 22, 2003 NOP identified 16 aircraft parking positions. This number was reduced to 12 to 14 by City Council action on February 8, 2005.
- ⁶ Subsequent to the approval of the alternatives definition by the City Council in February 2005, the Airport has leased office space from Million Air and there are plans to add an additional temporary trailer for security staff.
- The existing leased spaces would be replaced with new parking structure.
- The leases for the parking spaces are short-term leases. Current discussions with Boeing indicate that these spaces would not be available on a long-term basis.
- Represents terminal area as it existed before modulars and parking capacity without leased spaces.

4.3.1 ALTERNATIVE A

Facility Improvements

This alternative was based on the improvements proposed in the 2003 NOP, with minor modifications. Alternative A assumes the Airport terminal area would be a maximum of 97,545 square feet. The nature of the improvements would generally be the same as the Proposed Project. The distribution of the square footage by use is shown in Table 4.3-1. Compared to the Proposed Project, there are minor reductions in square footage in all except the following categories:

- Baggage security screening would be the same as the Proposed Project.
- No additional space is assumed for ticketing facilities.
- The amount of Airport office space is increased compared to the Proposed Project.

The 2003 NOP assumed 16 aircraft parking spaces. However, the City Council determined in February 2005 that no more than 14 aircraft parking spaces would be evaluated in the EIR; therefore, the 16 aircraft parking spaces presented in the 2003 NOP have been reduced 14 spaces for evaluation in this EIR. Other aspects of the project, such as the number of gates, aircraft parking and vehicular parking would be the same for Alternative A as for the Proposed Project.

The features described for the Proposed Project, such as modification to the interior of the existing Airport Terminal Building, the relocation of general aviation aircraft to Parcel O, the LEED standards, and application of the Guiding Principles during project design would all apply to Alternative A.

Refer to Table 4.5-1 for a comparison of Alternative A impacts to the Proposed Project.

4.3.2 ALTERNATIVE B

Facility Improvements

This alternative further reduces the size of the Airport terminal area improvements compared to the Proposed Project. This alternative assumes the Airport terminal area would be a maximum of 79,725 square feet. The distribution of the square footage by use is shown in Table 4.3-1. Similar to Alternative A, the nature of the improvements would generally be the same, though reduced in size compared to the Proposed Project, with the following exceptions:

- Baggage security screening would be the same as the Proposed Project.
- No additional space is assumed for ticketing facilities.
- No additional Airport office space is assumed as part of this alternative.

Other aspects of the project, such as the number of gates, aircraft parking and vehicular parking would be the same for Alternative B as for the Proposed Project. The features described for the Proposed Project, such as modification to the interior of the existing Airport Terminal Building, the relocation of general aviation aircraft to Parcel O, the LEED standards, and application of the Guiding Principles during project design would all apply to Alternative B.

Refer to Table 4.5-1 for a comparison of Alternative B impacts to the Proposed Project.

4.3.3 ALTERNATIVE C

Facility Improvements

Alternative C represents the No Project Alternative, which assumes that no new facilities would be provided at the Airport. The temporary holdrooms provided at the Airport would remain in place. The terminal, including holdrooms, would be a total of 56,320 square feet. The airline gates would be limited to the eight that currently exists. A total of 10 aircraft parking spaces would be provided at the Airport. The parking would be limited to the parking available onsite. This would include the existing parking structure and surface parking. The spaces that are currently leased off site would not be available because of the short-term nature of the leases. Based on recent discussions Boeing has indicated the leases would not be available on a long-term basis. Since no new vehicular parking spaces would be provided, this alternative would have a net loss of approximately 2,100 parking spaces compared to current conditions.

4.4 DESCRIPTION OF ALTERNATIVE CONSIDERED BUT NOT CARRIED FORWARD

CEQA Guidelines Section §15126.6(c) specifies that an EIR should identify any alternatives that were considered by the lead agency but were eliminated from detailed consideration because they were determined to be infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (1) failure to meet most of the basic project objectives; (2) infeasibility; or (3) inability to avoid significant environmental impacts. These factors are discussed below.

4.4.1 ALTERNATIVE D

As part of the 2003 NOP an alternative was presented that would reduce the terminal square footage from its current square footage (i.e., a roll-back alternative). This alternative assumed that no new facilities would be provided and that the temporary facilities currently in use would

be removed. The terminal would be limited to the 34,570 square feet comprised of the original terminal building and the 1984 improvements (permanent holdroom). There would only be eight airline gates and 10 aircraft parking positions. No new vehicular parking is assumed and the leased parking spaces are assumed not to be available because of the nature (month-to-month) of the lease. The significant impacts associated with the Optimized Flights scenario would still be applicable to this alternative since it is provided for in the Airport Noise Compatibility Ordinance and would apply to all alternatives.

The statistical summary of this alternative is shown in Table 4.3-1. For ease in comparison, the table also provides the square footage assumptions for both the Proposed Project and the No Project Alternative. Like the other alternatives, the Optimized Flights scenario would also apply to Alternative D.

A preliminary review of this alternative indicates that it would reduce short-term construction related impacts compared to the Proposed Project because no new facilities would be constructed. Existing temporary facilities would be removed and the area beneath the temporary facilities would remain undeveloped. However, this alternative was not carried forward for full evaluation because it would not meet the project objectives. As presented in Section 2.3, Project Objectives, and restated in Section 4.2.1, the key objective of the Proposed Project is to provide Airport terminal facilities to adequately accommodate the minimum number of flights provided for in the Airport Noise Compatibility Ordinance, as well as the number of passengers served by those flights. This Alternative can meet two of the Project Objectives. It would not affect the historic integrity of the terminal building (criteria 3) and criteria 4 would not apply because there is no construction proposed. However, it would not meet the first two criteria. This alternative would not be able to meet TSA requirements and City building codes. When the Terminal Building was designed in 1941 it accommodated approximately 25,000 average annual passengers. The 1984 permanent improvements were constructed to provide capacity for 15 daily flights. At the time, the Airport was serving approximately 1.1 million annual passengers (MAP). The Airport currently serves approximately 3.0 MAP. If all passengers needed to use the existing terminal, it is unlikely that City fire and safety codes could be met during peak hours. Additionally, the existing terminal does not have sufficient space to meet the current TSA screening requirements. Even with the temporary facilities, TSA has indicated the need for additional space to provide adequate passenger and baggage screening. The terminal would not meet the parameters of the Airport Noise Compatibility Ordinance (criteria 2) since it would not provide sufficient capacity to meet basic building and screening safety requirements.

Additionally, Alternative D would not avoid or substantially lessen any of the significant effects of the Proposed Project. This alternative would not reduce impacts on the community. Impacts associated with the flight operations (i.e., noise, air quality, and traffic) would not be alleviated. The flight activity is consistent with the Airport Noise Compatibility Ordinance. In fact, because no new vehicular parking would be constructed with this alternative, there would be an increase in the number of "meeters and greeters" compared to the Proposed Project because no additional parking would be provided.

Alternative D was found not to be a viable alternative because it does not effectively meet the project objectives. Additionally, it does not avoid or reduce the impacts associated with the Proposed Project. Therefore, this project was not carried forward for further evaluation.

4.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires that the EIR identify the environmentally superior alternative. Table 4.5-1 provides, in summary format, a comparison of the level of impacts for each alternative to the

Proposed Project. It should be noted that the impact evaluation for Alternatives A, B, and C was provided in Section 3.0, Environmental Setting, Impacts, and Mitigation Measures, sections of the Draft EIR and are not restated here. The No Project Alternative would avoid construction related impacts (i.e., short-term air quality, noise and traffic impacts); however, it would have more substantial long-term traffic impacts, and associated air quality impacts because there would be insufficient parking resulting in extra trips associated with "meeters and greeters," which would result in significant traffic impacts. Additionally, the No Project Alternative would not include the mitigation measures associated with the human health risk assessment. Therefore, the reduction in emissions provided for through the mitigation measures would not apply to the No Project Alternative.

Even if the No Project Alternative were to be considered environmentally superior, CEQA Guidelines Section 15126.6(e)(2) states, "if the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." When comparing the three build alternatives, the impacts would be very similar because the same types of improvements are proposed with each alternative. Table 4.5-1, Comparison of Impacts by Alternative, provides a qualitative comparison of the alternatives that were carried forward for evaluation.

Given no substantial difference in the impacts, the evaluation considers the ability of each alternative to meet the project objectives. Each of the alternatives (including the Proposed Project) would provide additional capacity that would help serve the number of passengers served by the minimum number of flights provided for in the Airport Noise Compatibility Ordinance. However, based on the HNTB study (2004) conducted during the scoping process, the recommended sizes of the facilities to best meet the needs for the passengers, visitors, and tenants actually exceeded the square footage allocation of even the Proposed Project. The Proposed Project is able to meet all the project objectives, including complying with the parameters of the adopted Airport Noise Compatibility Ordinance; maintaining the current character of the Airport Terminal Building as a Long Beach Cultural Heritage Landmark; and constructing an operationally and energy-efficient and value-driven design. The Proposed Project does not result in substantially greater impacts than the other build alternatives. Therefore, the Proposed Project is the environmentally superior alternative.

Another consideration when selecting the environmentally superior alternative is the consideration on the number of aircraft parking positions. The Proposed Project was evaluated with 14 parking positions. The project description identifies between 12 and 14 parking positions. However, the reduction to 12 parking positions would potentially result in an increase in air quality emissions. Based on Department of Transportation data, approximately 15 percent of the arrivals at the Airport are late. When aircraft arrive late during peak hours there would not be an available parking position at the terminal. As a result, the aircraft would need to wait until a position becomes available. In those cases the overall air emissions would increase from aircraft idling. The Proposed Project does not result in substantially greater impacts than the other build alternatives. Therefore, the Proposed Project is the environmentally superior alternative.

TABLE 4.5-1 COMPARISON OF IMPACTS BY ALTERNATIVE

Impacts	Proposed Project	Alternative A	Alternative B	Alternative C (No Project)		
Aesthetics						
The Proposed Project would alter views of the project site during construction activities, potentially resulting in short-term aesthetic impacts in the vicinity of the terminal.	Mitigated to less than significant	Impacts similar in nature. Also, mitigated to less than significant.	Impacts similar in nature. Also, mitigated to less than significant.	No Impact		
The Proposed Project would result in construction activities and expansion of the terminal facilities. This could result in light and glare impacts associated with security lighting and light emanating from the proposed improvements.	Mitigated to less than significant	Impacts similar in nature. Also, mitigated to less than significant.	Impacts similar in nature. Also, mitigated to less than significant.	No Impact		
Air Quality and Human Health Risk Assessment						
Project-related construction activities would result in a significant short-term construction-related air quality impact for NO_X and VOC .	Significant and unavoidable	Impacts similar in nature because the type of construction activities would be the same. Also, significant and unavoidable.	Impacts similar in nature because the type of construction activities would be the same. Also, significant and unavoidable.	No Impact		
Though not related to the proposed improvements, the air quality emissions with the Optimized Flights would exceed established thresholds for PM_{10} and result in a significant regional air quality impact.	Significant and unavoidable	Impacts similar in nature because the number of flights and passengers served would be the same. Also, significant and unavoidable.	Impacts similar in nature because the number of flights and passengers served would be the same. Also, significant and unavoidable.	Impacts similar in nature because the number of flights and passengers served would be the same. Also, significant and unavoidable.		
Though not related to the proposed improvements, the air quality emissions with the Optimized Flights would exceed SCAQMD's thresholds of significance for CO and NO_X .	CO impacts mitigated to less than significant. NO _x emissions would remain significant and unavoidable.	Impacts similar in nature because the number of flights and passengers served would be the same. CO impacts would be mitigated to less than significant. NO _x emissions would remain significant and unavoidable.	Impacts similar in nature because the number of flights and passengers served would be the same. CO impacts would be mitigated to less than significant. NO _x emissions would remain significant and unavoidable.	Impacts similar in nature because the number of flights and passengers served would be the same. CO impacts would be mitigated to less than significant. NO _x emissions would remain significant and unavoidable.		
Cultural Resources						
The Proposed Project would result in alterations to a designated historical landmark.	Mitigated to less than significant	Impacts similar in nature. Also, mitigated to less than significant.	Impacts similar in nature. Also, mitigated to less than significant.	No Impact		

TABLE 4.5-1 (Continued) COMPARISON OF IMPACTS BY ALTERNATIVE

Impacts	Proposed Project	Alternative A	Alternative B	Alternative C (No Project)		
Hazards and Hazardous Materials						
During construction, asbestos-containing materials could be disturbed and introduced into the environment.	Mitigated to less than significant	Impacts similar in nature. Also, mitigated to less than significant.	Impacts similar in nature. Also, mitigated to less than significant.	No impact.		
During construction, lead-based paint could be introduced into the environment.	Mitigated to less than significant	Impacts similar in nature. Also, mitigated to less than significant.	Impacts similar in nature. Also, mitigated to less than significant.	No impact.		
During grading activities at Parcel O, aerially-deposited lead could be introduced into the environment.	Mitigated to less than significant	Impacts similar in nature. Also, mitigated to less than significant.	Impacts similar in nature. Also, mitigated to less than significant.	No impact.		
During grading activities at Parcel O, DDT could be introduced into the environment.	Mitigated to less than significant	Impacts similar in nature. Also, mitigated to less than significant.	Impacts similar in nature. Also, mitigated to less than significant.	No impact.		
During construction, hazardous materials could be transported onto the Airport along established haul routes, including Willow Street.	Mitigated to less than significant	Impacts similar in nature. Also, mitigated to less than significant.	Impacts similar in nature. Also, mitigated to less than significant.	No impact.		
Land Use and Planning						
The potential to induce Airport land uses beyond the Airport boundary. Specifically, the increased flight levels would require additional vehicular parking beyond the levels provided by the Proposed Project.	This would not apply to the Proposed Project, but would be applicable to the Optimized Flights scenario. Mitigated to less than significant	Impacts similar in nature. This impact would only apply to the Optimized Flights scenario. Mitigated to less than significant.	Impacts similar in nature. This impact would only apply to the Optimized Flights scenario. Mitigated to less than significant.	Impacts would be substantially greater and would apply to Alternative C both with and without Optimized Flights. This would be a significant unavoidable impact.		
Noise						
No significant impacts were identified. All the alternatives would comply with the Airport Noise Compatibility Ordinance.	No impact; however, a land use compatibility program is proposed to address those sensitive uses currently within the 65 CNEL contour.	No impact; however, a land use compatibility program is proposed to address those sensitive uses currently within the 65 CNEL contour.	No impact; however, a land use compatibility program is proposed to address those sensitive uses currently within the 65 CNEL contour.	No impact; however, no mitigation is proposed with the No Project Alternative.		
Night construction activity on Parcel O may result in noise levels in excess of the noise levels specified in the Long Beach Noise Ordinance if heavy construction equipment associated with grading and paving are used.	Mitigated to less than significant.	Impacts similar in nature. Also, mitigated to less than significant.	Impacts similar in nature. Also, mitigated to less than significant.	No impact.		

TABLE 4.5-1 (Continued) COMPARISON OF IMPACTS BY ALTERNATIVE

Impacts	Proposed Project	Alternative A	Alternative B	Alternative C (No Project)	
Public Services					
Though not related to the proposed improvements, with the Optimized Flights scenario the capacity of the holdrooms may not be sufficient to accommodate the increased passenger levels and comply with applicable federal, State and local security and safety codes without modification of Airport operating procedures.	No impact.	No impact.	No impact.	Significant, unavoidable impact.	
Transportation and Circulation					
Though not related to the proposed improvements, under the Existing Plus Optimized Flights scenario the Spring Street/Lakewood Boulevard and the Willow Street/Lakewood Boulevard intersections would operate at deficient levels of service during the weekday AM peak hour.		Impacts similar in nature. Also, mitigated to less than significant.	Impacts similar in nature. Also, mitigated to less than significant.	Significant, unavoidable impact.	
There would be insufficient parking at the Airport to service the projected number of passengers.	This would not apply to the Proposed Project, but would be applicable to the Optimized Flights scenario. Mitigated to less than significant	Impacts similar in nature. This impact would only apply to the Optimized Flights scenario. Mitigated to less than significant.	Impacts similar in nature. This impact would only apply to the Optimized Flights scenario. Mitigated to less than significant.	Impacts would be substantially greater because no additional parking is proposed and the current leased parking would not be available in the 2020 timeframe. This would apply to with and without Optimized Flights. This would be a significant unavoidable impact.	